



Form GSOP 1-PIN (04/98)

STATE OF CALIFORNIA
Department of General Services - Office of Procurement

PURCHASE ORDER

Page 1

Purchase Order No. Rev. Date
62093 6/30/2008

Supplier No.	Solicitation No.	Delivery Date	FOB Point	Invoice Terms
410575	56884	150 Days ARO	Destination	
S h i o p DEPT OF WATER RESOURCES (AS SPECIFIED)		C h a r o s e WATER RESOURCES A-36 ATTN: ACCOUNTS PAYABLE PO BOX 942836 SACRAMENTO, CA 94235-001		
Agency Billing		Agency Purchase Estimate	Purchase Estimate	Revision
81000		6000017819	67096	0
Agency Contact		Phone	Date Received	
BILL MAHON		916-653-6167		

MUNICIPAL MAINTENANCE
EQUIPMENT INC
2360 HARVARD STREET
SACRAMENTO, CA 95815-2718
Attn: FRANK WHEELER

Phone: 916-922-1101

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
THE GENERAL PROVISIONS FOR NON-IT COMMODITIES ARE HEREBY INCORPORATED BY REFERENCE. THESE GENERAL PROVISIONS CAN BE OBTAINED BY PHONING (916) 375-4400 OR BY ACCESSING OUR WEBSITE AT: www.documents.dgs.ca.gov/pd/modellang/GPnonIT0407.pdf						
THE FOLLOWING INFORMATION IS PROVIDED FOR AGENCY USE ONLY:						
PRIME CONTRACTOR: NS FISCAL YEAR: 2007 / 2008						
1	1	EA	2420-422-0103-7	TRACTOR 4-WHEEL DRIVE (AS DESCRIBED) A Four Wheel Drive Agricultural Tractor Equipped with Boom Mower as described meeting the requirements of the attached Specification # 2420-08BS-003 of four (4) pages dated May 12, 2008.	136,149.0000	136,149.00
Brand: <u>TIGER / JOHN DEERE</u> Model: <u>SBF / 7130</u>						
					Total Value:	136,149.00

Sales and/or use tax to be extra unless noted above

Buyer RONNIE WILLIAMS	Phone 916-375-4586	BOC Number
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Department of General Services - Office of Procurement

Form GSOP 2-PIN (04/98)

Page 2 (Last)

Item No.	Quantity	Unit	Commodity Code	Description	Unit Price	Extension
<p><u>ATTACHMENTS</u></p> <p>THE FOLLOWING ATTACHED DOCUMENTS ARE PART OF THIS PURCHASE ORDER.</p> <p>1. ADMINISTRATIVE REQUIREMENTS OF FOUR (4) PAGES, DATED MAY 12, 2008.</p> <p>2. SPECIFICATIONS #2420-08BS-003 OF FOUR (4) PAGES, DATED MAY 12, 2008.</p>						
<p><u>FOR THE PURPOSE OF THIS ORDER</u></p> <p>For the purpose of this order only F.O.B. Destination will be accepted.</p>						
<p><u>DECREASING / INCREASING PURCHASE QUANTITIES:</u></p> <p>The State reserves the right to increase the purchase quantity by up to 25% more units within 180 days of bid award date for State Agencies in California.</p>						
<p><u>DELIVERY INSTRUCTIONS:</u></p> <p>Delivery date will be 150 days ARO.</p> <p>Preparation for Delivery: The completed vehicle as presented for the "final" acceptance shall be cleaned, internally and externally (freshly washed and chamois) and with a full charge to the battery system.</p> <p>The Tractor shall be fully serviced and functional when delivered.</p> <p>Tractor shall be delivered during normal business hours, Monday-Friday, from 8:00 a.m. to 3:30 p.m., except State holidays.</p> <p>Deliver to: Department of Water Resources Corporation Yard 4300 West Capitol Ave, West Sacramento, CA 95691 Attn: Jim Pearson</p> <p>Please contact agency seven (7) days prior to delivery to make arrangements for delivery.</p> <p>Contact: Jim Pearson Phone: (916) 653-9051</p>						
<p><u>SCPRS REGISTRATION</u></p> <p>This Purchase order has been registered into the state contract and procurement registration system (https://www.scprs.dgs.ca.gov/). The registration number is 38600708322661.</p> <p>This purchase order is being awarded on JULY 18, 2008 pursuant to Government Code Section 13332.17. Any encumbrances made pursuant to this purchase order shall be construed to have been made on the last day of the preceding fiscal year.</p>						
<p><u>CHANGE ORDERS</u></p> <p>This Purchase Order may be amended, modified, or terminated at any time by mutual agreement of the parties in writing. Change orders amending, modifying or terminating the Purchase Order, including any modifications of the compensation payable may be issued only by the State Procurement Officer. All such change orders shall be in writing and issued only upon written concurrence of the supplier. Termination, as that term is used in this section, does not include termination for default of the supplier.</p>						



STATE OF CALIFORNIA
ADMINISTRATIVE REQUIREMENTS
TRACTOR, 4WD, 110 HP, BOOM MOWER

67096AR

1 VEHICLE REGISTRATION DOCUMENTS REQUIRED

The original dealer's "Report of Sale" shall be furnished by all California licensed dealers at the time of delivery of each unit(s) covered by these specifications. A "Manufacturer's Statement of Origin" and original "Bill of Sale" on the vendor's letterhead may be supplied for each unit in lieu of a dealer's Report of Sale, if the supplier is not a registered California dealer. An original weight certificate from a California certified Weigh Master for registration purposes must be supplied at the time of delivery of the unit. A Federal Excise Tax Exempt Certificate will be attached to the purchase order. All documentation supplied for registration shall contain the following physical and post office box addresses:

State Department Water Resources

1416 9th Street

Sacramento, CA 95814

State Department Water Resources

P.O. Box 942836

Sacramento, CA 94236-0001

All required documentation shall be sent to the above address by the time of delivery.

NOTE: The State shall register/license all vehicles with the Department of Motor Vehicles.

2 BOOKS AND MANUALS

One (1) set of standard operator's safety and operating instructions, lubrication instructions, and maintenance instructions shall be supplied with each unit. One (1) set of parts books and service/repair manuals shall be supplied and delivered with the unit to the delivery "Ship To" destination as indicated in the "Invitation to Bid." Said manuals shall include both the tractor and mower units.

3 WARRANTY

The unit and any operational accessory shall be free from defects in workmanship and materials and be covered (parts and labor) under warranty for one (1) year following the date the Department of Water Resources (DWR) puts the unit into service. DWR will notify the supplier by mail of the in-service date.

A copy of the manufacturer's standard warranty for the unit, any accessory, optional equipment, and components shall be supplied with the unit at delivery, or upon request. The manufacturer will be held responsible for warranty (commencing from the date DWR puts the unit into service) for the following circumstances:

1. The manufacturer's standard warranty exceeds one (1) year. Under this circumstance, the supplier is responsible until one (1) year is reached. The manufacturer will be held responsible for the balance of the manufacturer's standard warranty.
2. The supplier is no longer an authorized dealer of the equipment supplied. Under this circumstance, the manufacturer will be held responsible for the balance of the manufacturer's standard warranty. The manufacturer shall establish a fully operational warranty service provider with capabilities equal to or exceeding the supplier's (or his designated warranty provider) within 45 days of the supplier's authorized dealer termination.

If the supplier is not the manufacturer or manufacturer's authorized representative, then a statement agreeing to the warranty conditions stated herein shall be signed by the manufacturer and submitted upon request prior to the Purchase Order award.

If warranty work is necessary, the supplier shall pick up the unit within 48 hours of notification, written or verbal at the DWR facility where the unit is assigned. The unit shall be repaired and returned within 10 working days to the DWR facility where the unit was originally picked up.

Any supplier or manufacturer found to be non-compliant with the warranty provision set forth herein may be subject to removal from any future bidding by the State of California, Department of General Services, Procurement Division.

4 SAFETY

The entire unit and accessories shall comply with the applicable provisions of the California Vehicle Code, the Safety Orders of the Division of Industrial Relations, and all Federal regulations in effect at the same time of manufacturer.

5 TRAINING

The supplier, at his expense, shall provide a qualified factory-authorized service representative to provide operational and technical training for equipment operators and shop mechanics. Training shall consist of a combination of classroom discussion and/or audio-visual aids and hands-on operation for the operators. Training shall also include safety instructions, operation, maintenance, and lubrication requirements, any special adjustments and minor repair procedures. Shop mechanics shall also receive procedures for ordering parts, repair manual and parts book orientation.

The training shall be for one 8-hour day, or longer if the supplier deems necessary. The date of the training shall be coordinated between the supplier and the Department of Water Resources' Transportation Office at (916) 653-9051. The training shall be completed within 45 days after final delivery. The full cost of this service shall be included in the bid. Equipment training will be held at the Division of Flood Management's Sacramento Maintenance Yard which is located at the following address.

1450 Riverbank Road

West Sacramento, CA 95605-2028

6 INSPECTION

This order will require a two (2) phase inspection process. For all inspections the unit will be serviced, washed, and ready for (as applicable) inspection or delivery. Inspections will begin within five (5) working days from the date of the inspection request by the supplier. It is the supplier's responsibility to contact the Transportation Office at (916) 653-9051 for inspections.

FIRST PHASE (PRE-DELIVERY INSPECTION): In accordance with the State Administrative Manual, Section 4112 and the DWR inspection program, each unit will be inspected prior to shipment to the destination on the purchase order. This inspection trip shall be State financed at no cost to the supplier.

Arrangements for pre-delivery inspection shall be made by the successful contractor and if corrections are needed, as a result of the inspection, the corrections shall be made prior to shipment to the purchase order destination. Authorization to deliver the unit must be granted by the Department of Water Resources, Transportation Office.

If additional interim inspections are required, such inspection trips shall be at the expense of the supplier at \$75.00 per hour (including travel time) and all expenses (meals, lodging, and cost of transportation). Travel expenses will be documented on State of California, Department of Water Resources, Travel Expense Claim Form, DWR 330. These fees may be deducted from the invoice.

PRE-DELIVERY INSPECTION LOCATION: The Department of Water Resources, Transportation Office shall conduct the inspections. These inspections shall take place at an adequate site provided by the vendor within the State of California. The inspection site shall meet all of the following criteria:

- a. The site shall not be the purchase order delivery destination. The site shall be paved, secure, and zoned for commercial use.
- b. The site shall include electricity, lights, water, compressed air and a secure paved lot. The facilities shall also include lift equipment adequate to raise the units and support them on safety stands with a minimum of

12 inches of tire clearance. The supplier shall provide conditions, which meet the safety standards of CAL-OSHA and Title 8 of the California Code of Regulations.

- c. The Department of Water Resources, Transportation Office shall determine the adequacy of the site. Contact the Transportation Office at (916) 653-9051 for approval.
- d. If the facility is deemed unacceptable by the Department of Water Resources, Transportation Office, the vendor shall be billed for the inspections trip including wages and expenses. This cost shall be deducted from the purchase order payment.

SECOND PHASE (FINAL INSPECTION): This unit will have a final inspection at its delivery destination shown on the purchase order to verify acceptability. The State will have five (5) working days after delivery of a unit to conduct the final inspection of said unit. The Unit delivered to the final purchase order destination will be accepted only when all purchase order requirements have been met, any shipping damages have been corrected, and all required documents are received by the Department of Water Resources' Transportation Office. These documents include, as applicable, the invoice, vehicle registration documents, parts book, operator's manuals, service manuals, service questionnaires, etc. A Unit which is not accepted by the delivery date on the purchase order will be considered delivered late.

If the supplier receives notice that the unit is not acceptable, whether written or oral, the unit shipped to the purchase order destination shall be removed within seven (7) calendar days. If the supplier fails to remove said unit from the State's facilities within the specified period, the State may forward said unit to the supplier by common carrier at the supplier's expense and risk.

7 DELIVERY

Inspection, delivery, and final acceptance of the unit shall be within 150 calendar days after the purchase order date. Contact the State of California, Department of Water Resources, Transportation Office at (916) 653-9051 for delivery.

Failure of any unit to comply with the specification by the final delivery date may place the supplier in default and may be grounds for the State to invoke Paragraph 25 of the General Provisions, Rights and Remedies of the State for Default. The Department of General Services, Procurement Division will be notified at such time.

Acceptance of delivery or placement in operation of any equipment shall not release the manufacturer from liability for faulty design, workmanship, or material appearing even after the final payment has been made.

8 LATE DELIVERY CHARGES

The parties to this agreement acknowledge that the State shall incur actual damages should the supplier fail to perform the work as called out in the contract and specification on the dates set forth herein. The parties, therefore, have agreed to late delivery charges in the amount of \$20.00 per unit per workday.

Workdays are Monday through Friday inclusive, except State holidays observed Monday through Friday inclusive.

The parties also agree that the amount specified is not unreasonable nor punitive in nature because both parties have carefully considered the amount specified and believe it to be a reasonable estimate, and not excessive at the time the purchase order is entered into.

It is, therefore agreed, that the supplier will pay the State of California the sum of \$20.00 per unit per work day (as stated above) for each work day the work remains uncompleted or unacceptable by the State, provided the total late delivery charges assessed against the supplier shall in no event exceed twenty five percent (25%) of the total value of the entire order, and the supplier agrees to pay said damages as herein provided. In the event such damages are not paid, the supplier agrees that the State may deduct the amount thereof from any monies due or that may become due said supplier.

9 QUESTIONNAIRE

The attached questionnaire shall be filled out and will become part of each bid submitted. Any portion of the questionnaire which is not applicable to the equipment shall be shown as N/A (not applicable).

Unless otherwise stated in the purchase order, the requirements of the written purchase order specifications shall have precedence over the completed questionnaire; and the completed questionnaire shall have precedence over standard factory specifications or literature.

10 GENERAL

One (1) complete set of additional filters (air, oil, water, fuel, hydraulic, etc.) shall be supplied with the first unit delivered. This additional set of filters shall be as recommended by the manufacturer and shall be complete with the appropriate part numbers for identification. Each unit and any accessory shall be delivered completely assembled and ready to operate. No exceptions to the specifications shall be allowed unless the exceptions are listed on the purchase order or subsequent addenda. The component parts of the unit shall be new and of proper size and design to safely withstand the maximum stresses imposed. The manufacturer's torque rating of each driven part shall be equal to or exceed the torque rating of its driving member. Complete printed specifications, published literature, and photos or illustrations of unit or units that the bidder proposes to furnish shall be supplied upon request. All equipment and accessories catalogued as standard, unless superseded by these specifications, are to be furnished and included in purchase price of this unit.

Bids will be considered only on equipment represented by an authorized distributor/dealer capable of providing adequate repair parts, warranty, technical assistance, and training in the United States as of the bid opening date. The authorized distributor/dealer shall be capable of supplying repair parts to DWR within five (5) working days after a purchase order for parts is submitted to the supplier, whether by phone, fax, or mail. Bidders may be required to provide documentation supporting this requirement prior to award of the contract.

Authorized Distributor/Dealer: ONLY BIDS SUBMITTED BY A MANUFACTURER OR AN "AUTHORIZED DISTRIBUTOR/DEALER" WILL BE ACCEPTED. AN "AUTHORIZED DISTRIBUTOR/DEALER" IS A SUPPLIER WHO IS NORMALLY AND REGULARLY ENGAGED IN THE BUSINESS OF SELLING THE PRODUCTS OF THE MANUFACTURER. TO QUALIFY AS AN "AUTHORIZED DISTRIBUTOR/DEALER", A SUPPLIER MUST HAVE TECHNICAL EXPERTISE IN THE PRODUCT LINE(S) BEING OFFERED FOR SALE, EMPLOY INDIVIDUALS WHO ARE KNOWLEDGEABLE IN/WITH THE PRODUCTS BEING OFFERED, MAINTAIN AN INVENTORY OF FINISHED PRODUCT AND/OR SPARE PARTS AND OFFER TECHNICAL ASSISTANCE AND REPAIR CAPABILITIES. ALL "AUTHORIZED DISTRIBUTORS/DEALERS" MUST PROVIDE SUBSTANTIALLY THE SAME LEVEL OF SERVICE.

"AUTHORIZED DISTRIBUTOR/DEALERS" MUST BE LISTED IN THE MANUFACTURER'S WRITTEN OR ELECTRONIC LIST OF DISTRIBUTORS IF SUCH A LIST EXISTS. AN "AUTHORIZED DISTRIBUTOR/DEALER" SHOULD HAVE DOCUMENTATION OR A SIGNED AGREEMENT FROM THE MANUFACTURER INDICATING ITS STATUS AS "FACTORY AUTHORIZED: AND THESE DOCUMENTS MUST BE MADE AVAILABLE TO THE STATE UPON REQUEST. A "ONE-TIME" AGREEMENT IS NOT ACCEPTABLE.

Bids will not be considered if supplier's designated f.o.b. delivery destination is other than the delivery address stated in the "Invitation to Bid."

Only new models in current production, which are cataloged by the manufacturer and for which manufacturer's published literature and printed specifications are currently available, will be considered. Special options may be included only when recommended by the manufacturer of the unit and approved by the State.

All equipment/options are to be factory installed. If the equipment/options are not available factory installed, dealer installed equipment/options may be acceptable. The bidder is to specify those items which will be dealer installed.

The State reserves the right to purchase a minimum of one (1) additional unit, or up to an additional 25% of the quantity on the purchase order, at the bid prices, for State Agencies and California Local Government Agencies. Orders for such additional units shall be placed within 180 days of bid award date.

11 CHANGE ORDERS

This contract may be amended, modified, or terminated at any time by mutual agreement of the parties. Change orders amending, modifying, or terminating the contract including any modifications of the compensation payable, may be issued only by the State Procurement Officer and shall be in writing. Termination, as that term is used in this section, does not include termination for default of the supplier.



STATE OF CALIFORNIA
BID SPECIFICATION
TRACTOR, 4WD, 110 HP, BOOM MOWER

2420-08BS-003

1 SCOPE

This specification establishes the minimum requirements for a four wheel drive agricultural tractor equipped with an enclosed cab and a 20 foot boom mower. The tractor will be utilized for removing vegetation in areas with typical California ambient temperatures. The supplier is responsible for providing a truck that meets the following minimum requirements.

2 APPLICABLE SPECIFICATIONS / STANDARDS / CODES

Specifications, standards and codes referenced in this document in effect on the opening of the 'Invitation For Bid', form a part of this specification. The vehicle furnished under these specifications shall conform to all of the requirements of all Divisions and Chapters of the following publications:

1. California Vehicle Code
2. California Air Pollution Control Board Air Pollution and Exhaust Emission Control requirements
3. Federal Motor Vehicle Safety Standards
4. Cal-OSHA safety requirements

3 REQUIREMENTS

3.1 GENERAL

The vehicle shall be new and equivalent in style, quality, and appointments to those offered to the general public. The vehicle shall be supplied with all equipment and accessories indicated as standard equipment in the manufacturer's published literature. Optional equipment necessary to meet the requirements of this specification shall also be installed. The vehicle shall meet the following requirements:

- Overall Vehicle Length: 15.5 ft. (maximum)
- Overall Vehicle Height: 12 ft. (maximum)
- Overall Vehicle Width (mower in stowed position): 110 in. (maximum)
- Front Tread Width: 78 in. (minimum)
- Rear Tread Width: 78 in. (minimum)
- Wheelbase: 104 in. (minimum)
- Ground Clearance: 10 in. (minimum)
- Outside Noise: 90 db (maximum)
- Inside Cab Noise: 75 db (maximum)

3.2 ENGINE

The vehicle shall be equipped with the manufacturer's standard diesel engine that meets the following minimum requirements:

- Power: 110 hp gross (minimum)
- Torque: 320 lbs.-ft. (minimum)
- Fuel Tank: 50 gal. (minimum)

The engine shall be equipped with, but not limited to, the following accessories:

- Hand throttle control
- A variable speed engine governor, factory set to the engine manufacturer's recommended RPM for tractor/mower applications.
- Key-type electric start/shut off
- 2-stage air filtration system with cab mounted restriction gauge
- Replaceable spin-on type oil filter
- Exhaust system that prevents rain from entering

The tractor shall be equipped with visual and/or audible warning devices, in addition to the gauges, to alert the operator of conditions critical to the engine and equipment operation. The tractor's operating station shall be equipped with, but not limited to, the following engine monitoring and instrumentation warning devices:

- Engine Oil Pressure (gauge and critical warning)
- Engine Coolant Temperature (gauge and critical warning)

- Engine Tachometer
- Engine Hour Meter
- Fuel Level
- System Voltage
- Hydraulic Oil Temperature (gauge and critical warning)

3.3 TRANSMISSION

The transmission shall have a minimum of 16 forward speeds and six reverse speeds OR an infinitely variable transmission. The transmission shall include at least four speeds below 1.0 mph at full throttle, and still be capable of traveling 22 mph or higher. The tractor shall be equipped with a transmission safety device that will prevent the engine from starting or prevent the machine from moving if the engine is started while the transmission is engaged.

3.4 AXLES

The front axle shall have a Gross Axle Weight Rating (GAWR) of at least 8,300 pounds and the rear axles shall have a GAWR of at least 14,300 pounds. The rear axle assembly shall be equipped with a lockup differential which can be controlled from inside the cab.

3.5 STEERING

Steering shall provide a minimum turning radius of not greater than 21.5 ft.

3.6 FRONT WHEEL DRIVE

The tractor shall be equipped with a front wheel drive system that allows the drive to be disconnected and allow the front wheels to spin freely.

3.7 BRAKES

The self adjusting brakes shall be foot operated and capable of applying braking force to all four wheels. Hydraulically boosted or hydraulically actuated power braking systems shall incorporate emergency braking capability to allow the operator to stop the tractor in the event of an engine failure. The tractor shall be equipped with a parking brake or transmission lock to prevent the wheels from rolling while the tractor is parked.

3.8 TIRES

The tractor shall be equipped with R-4 (industrial) type tubeless tires.

3.9 CAB

The tractor shall be equipped with a suspended, fully enclosed cab. The cab shall be constructed to afford the operator visibility for the entire operation. The cab shall be completely sealed and pressurized to protect the operator from the external environment. In addition to the fully enclosed cab, the operator shall be protected by a Rollover Protective Structure (ROPS) certified by the manufacturer to conform to the requirements of SAE J1194 Standard "Rollover Protective Structures for Wheeled Agricultural Tractors."

In addition to, or in place of, safety glass, the cab shall be equipped with transparent, polycarbonate (lexan) type, high impact, right side safety shield(s) to protect the operator from flying debris created by the operation of the mowing unit(s) (front and rear mowers). The safety shield(s) shall be properly positioned to protect the operator throughout the entire range of both mowers. If the safety shield is mounted to the cab's exterior, the shield must be hinged on its side, allowing the shield to swing away from the cab's glass window for cleaning purposes.

The following items, supplementing if necessary those items already cataloged as standard cab equipment, shall be furnished and installed:

- 3.9.1 Safety glass windows
- 3.9.2 Key-type locking door(s)
- 3.9.3 Padded suspension seat with backrest and seat belt
- 3.9.4 Adjustable steering wheel
- 3.9.5 AM/FM radio
- 3.9.6 Front windshield wiper and washer
- 3.9.7 Interior rear view mirror
- 3.9.8 Horn

3.10 AIR CONDITIONING

A multi-speed cab heater, air conditioning and windshield defroster shall be included. The system shall come equipped with fresh air ventilators or combination fresh air and recirculating ventilation system. The system shall include a HEPA filtration system capable of filtering out normal particulate encountered during roadside mowing operations (e.g., dust, pollen, etc.).

3.11 ELECTRICAL SYSTEM

The electrical system shall comply with all Federal and State regulations for "On-Highway Trucks". The system voltage shall be 12 Volt and include a maintenance free type battery with a minimum 600 CCA at 0° F. The alternator shall be rated at 100 amps (minimum). The tractor will come equipped with the following lighting as a minimum:

- Two front driving lights
- Two front work lights
- Two rear work lights
- Rear tail and stop lights
- Front and rear mounted turn signals
- Rear license plate lamp
- Rotating beacon (Reference Federal Signal, MFR Part No. 443112-02 or equivalent)

3.12 HYDRAULICS

3.12.1 Tractor Hydraulics: A minimum of four factory installed remote circuits with SAE/ISO couplers shall be available in addition to the circuits used for the installed boom mower. Each circuit shall have a selective control valve with float capability. At least one circuit shall have a positive detent to allow the control lever to be locked at maximum continuous flow. A variable pressure/flow compensated hydraulic system shall consist of a variable pressure hydraulic pump capable of producing a minimum of 25 gal/min at 2,700 psi.

3.12.2 Mower Hydraulics: The mower hydraulic system may be independent of the tractor hydraulics. The pump shall be sufficient capacity to meet or exceed the hydraulic requirements of the mower and boom assemblies. The mower hydraulic system shall be equipped with a minimum 50-gallon reservoir and include a hydraulic oil cooler. The oil cooler shall be capable of removing a minimum of 75% of the heat generated by the hydraulic system with ambient temperatures of 110°. The hydraulic reservoir shall be equipped with an oil level gauge. The mower hydraulic system shall utilize a replaceable element filter with filtering capability of 25 microns or less. The boom lift hydraulic circuit shall incorporate a hydraulic accumulator or other similar device designed to absorb quick and jerky boom movements experienced during mowing operations. Hose connections between the boom and the mower head shall incorporate a quick coupler.

3.13 THREE-POINT HITCHES

The tractor shall be equipped with a rear mounted, hydraulically controlled, Category 3N/2 three point hitch and a swinging drawbar.

3.14 POWER TAKE-OFF (PTO)

The tractor shall be equipped with an independent 540/1000 rpm rear PTO rated at 95 hp (minimum).

3.15 BOOM MOWER

The boom support assembly shall be mounted to the tractor frame to maximum stability and operation of the mower on the right side of the tractor. The boom support assembly shall be installed in a manner so that it will not obstruct the view of the operator to the front or left side of the tractor while in the stowed or operational position. Additionally, the boom support shall be stowed in position to allow the installation of the rear mowers (not included in this solicitation) connected to the 3-point hitch. The boom assembly shall provide interchangeability between the mowing heads. The boom assembly shall meet or exceed the following requirements:

- Horizontal Reach: 20.0 ft. (minimum)
- Vertical Reach: 22.0 ft. above and 14 ft. below horizontal
- Horizontal Swing Arc: 50° total; 25° front and 25° rear of the normal mowing position.
- Pivot: 20° to the front and 90° to rear

Note: Reach measurements are taken from the outside edge of the right rear tire to the center of the cutter head. Swing arc measurements are taken from the boom swing pivot at ground level to the mower cutting plane. The boom assembly shall provide mowing capability throughout its range.

3.16 FLAIL MOWING HEAD

The flail mowing head shall be capable of cutting material 4 inches thick. The mowing head shall be capable of being mounted onto the boom assembly and meet or exceed the following requirements:

- Hydraulically Pivot: 180° (minimum)
- Cut Width: 48 in. (minimum)
- Cut Height Range: 2 to 6 in. above ground surface (minimum)

3.17 ROTARY MOWING HEAD

The rotary mowing head shall be capable of being mounted onto the boom assembly and meet or exceed the following requirements:

- Rotation: 360°
- Cut Width: 50 in. (minimum)
- Cut Blades: Two (minimum)

3.18 PAINT

The cab, hood and fenders shall be finish painted with the manufacturer's standard lead-free enamel paint (lead-free: 100-PPM maximum based on dry paint). The finish coat shall be free from runs, drips, sags, etc., and shall be evenly applied to provide a gloss finish.

3.19 MISCELLANEOUS

The following miscellaneous equipment shall be furnished and installed:

- Vandal Protection Package: Vandal protection shall include the engine compartment, battery compartment, and all fluid fill ports. All locks shall be keyed alike and four sets of keys shall be supplied.
- Fenders: The tractor shall be equipped with front (where available) and wheel fenders to protect the operator from flying debris and excessive dust exposure created by the tires during machine operation and transport.
- Tie Downs: The tie-downs shall be appropriately secured to and located on the tractor to provide adequate holding strength during transport of the machine.
- Backup Alarm